

CLAIMS:

1. A radar system including a head containing a radar transmitter and receiver and closely associated with a radar antenna wherein the head also includes a signal processing unit for processing the received radar signals and for combining these with
5 video from other sources, which signal processing unit can simultaneously output video data in more than one digital format for use by at least one digitally driven display unit.
2. A radar system as claimed in claim 1 wherein the signal processing unit can simultaneously output video data for at least two differing processed radar signals.
- 10 3. A radar system as claimed in claim 1 wherein the signal processing unit can output at least a raw radar video signal and a processed radar signal.
4. A radar system as claimed in claim 1 wherein the signal processing unit can simultaneously output radar video signals for differing radar ranges.
- 15 5. A radar system as claimed in claim 1 wherein the signal processing unit is controllable by digital input signals.
6. A radar system as claimed in claim 1 wherein the signal processing unit can receive control signals for the radar receiver and transmitter.
7. A radar system as claimed in claim 1 wherein the signal processing unit can receive digital signal inputs which can be added to the video output during processing.
- 20 8. A radar system as claimed in claim 7 wherein a north heading signal is combined with the radar signal to allow synchrony with other video feeds.
9. A radar system as claimed in claim 1 wherein the signal processing unit may output signals representative additional video feeds.
10. A radar system as claimed in claim 1 wherein all signal processing is carried out
25 digitally.
11. A radar system as claimed in claim 1 wherein the radar transmitter is controllable by digital signals from the signal processing unit.

- 9 -

12. A radar system as claimed in claim 1 wherein the digital signals are to a standard specification.
13. A radar system as claimed in claim 1 wherein the digital signals are USB, Firewire, Bluetooth or Ethernet protocol.
- 5 14. A radar system as claimed in claim 1 wherein the output feed may be utilised by more than a single display unit.
15. A radar system as claimed in claim 1 wherein the digital signals are distributed wirelessly.
- 10 16. A digital display for a system as claimed in claim 1 wherein the display may select one or more video signals from those provided by the system.
17. A digital display for a system as claimed in claim 1 wherein the display has inputs allowing remote control of the radar transmitter, receiver or signal processing.
- 15 18. A method of producing a radar signal for a remote display consisting in receiving at least one video radar signal at a radar head, receiving at least a video signal from a map or chart overlay at said radar head, receiving a signal capable of orienting the radar signal against the map signal at the radar head, and producing a digital video output consisting of at least two video signals wherein the signals may be displayed on at least one video display separately or combined.
- 20 19. A method of producing a radar signal for a remote display wherein the digital video output includes a raw radar output, a processed radar output, a GPS map output and at least one heading signal.
20. A method of producing a radar signal for a remote display wherein the heading signal is a north heading signal.